

# NIEHS Program Analysis Branch

## What is our role in communicating research results?



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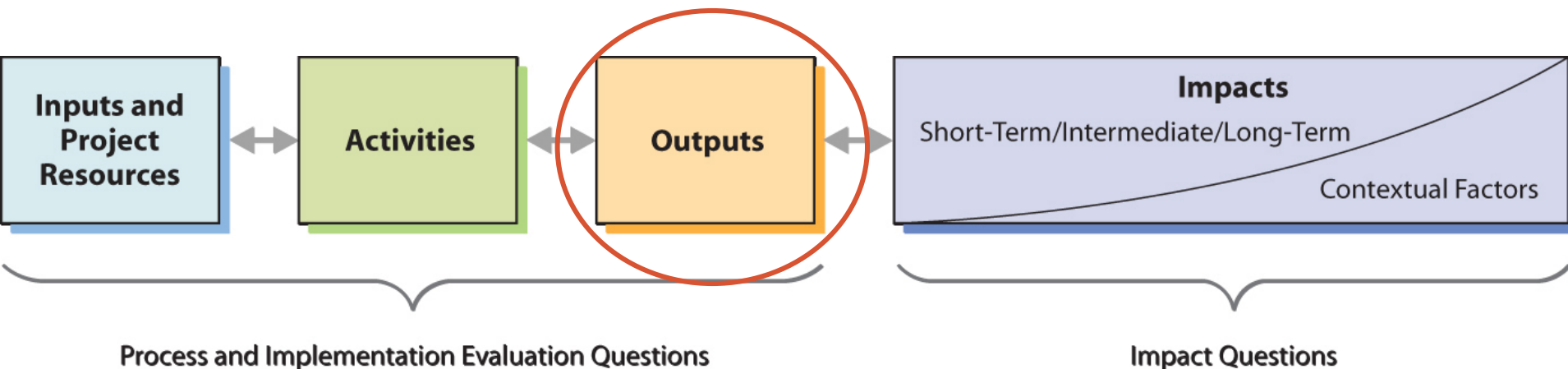
## Program Analysis Branch Mission

- Evaluate portfolios and programs;
- Develop methodologies and data structures to support analyses of scientific and public health impact;
- Identify emerging areas for program development; and
- Communicate high impact science and public health relevance of extramural research

in support of

- Priority setting, decision making, and strategic planning

# How do we identify research impacts?



**Logic Model** – organized, project specific, informs metrics

- **Inputs** – resources available
- **Activities** – actions that use available resources
- **Outputs** – direct products of activities
- **Impacts** – benefits or changes resulting from activities, outputs

# Building Blocks to Measuring Impact

Special Data  
Collection

Progress Reports

Publications

## Building Block: Publications

- All publications should cite your grant number
- Best format: **R01** **ES** **123456**
- SPIRES is a tool that automatically links publications to NIH grants
- Part of the NIH wide database of grants
- Critical that the links be automated... we can't look to progress reports for publications

Publications

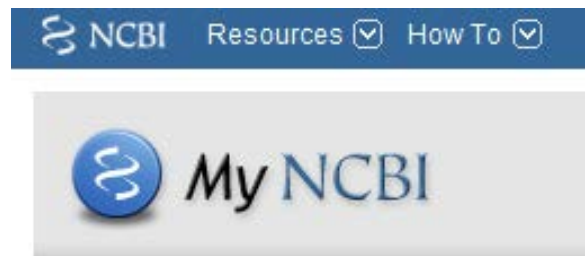
## Recent Review of Core Center Publications

- Identified publications cited in 2009 progress reports (n=10)
- Looked for each publication in SPIRES and PubMed
- 95% of the publications in progress reports are in PubMed
- 33% of the publications are in SPIRES (5-95%)
- No change in average citation rate since 2000

## Improving grant/publication links

New Tools, such as “MyBibliography” from NLM, allow PI’s to link grants with publications retroactively

- Working to identify/develop instructions for grantees



**Check out My Bib Instructions at:**  
**<http://www.ncbi.nlm.nih.gov/books/NBK53595/>**

Things may improve with Federal Wide Progress Reporting (RRPR) – coming soon

## Progress reports = 2<sup>nd</sup> building block

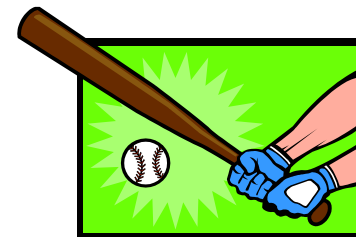
- NIEHS uses Progress Reports
  - Research changes when you “hit the ground”
    - New technologies, leverages work from others, etc
    - Unanticipated findings
  - New tool: High Impacts Tracking System

Progress Reports

Publications



# High Impacts Tracking System (HITS)



- Goals
  - Leverage existing IMPAC II information that has not been searchable
    - Progress reports
    - Program officer notes (Type 5 review)
  - Identify scientific advances (content of publications)
  - Apply specific “codes” for various topics
  - Develop robust infrastructure for tracking impacts
  - Complement existing tools

## HITS Codes (Examples)

- Grant outputs/impacts
  - Animal models
  - Biomarkers
  - Curricula/guidelines
  - Databases/Software
  - Policy/Regulations
  - Sensors
  - Scientific findings
- Dissemination information
  - ARRA Reports
  - NIEHS Paper of the month
  - “BRAIN” database
  - Press Release

## Specialized data collection = 3<sup>rd</sup> Building Block

- PI/Program Officer surveys
- End user surveys
- Trainees: CareerTrac System

Special Data  
Collection

Progress Reports

Publications

# Tool Development

- Systematic data collection to improve strategic planning and decision making
- Examples:
  - High Impacts Tracking System
  - CareerTrac
  - Partnerships for Environmental Public Health Evaluation Metrics Manual

High Impacts Tracking System





# CareerTrac Trainee Tracking

- Partnership with Fogarty International Center (10+ years in development)
- Goals
  - Provide a structured database that captures trainee outcomes:  
*Where are they now??*
  - Improve access to existing data (T32 tables)
  - Scalable infrastructure
- Current “tenants”
  - FIC/NCI D43, R25 Grantees (N=5000+)
  - NIEHS T32 (N= 5000+)
  - NIEHS Superfund Trainees (N=1000+)

# Evaluation Metrics Manual

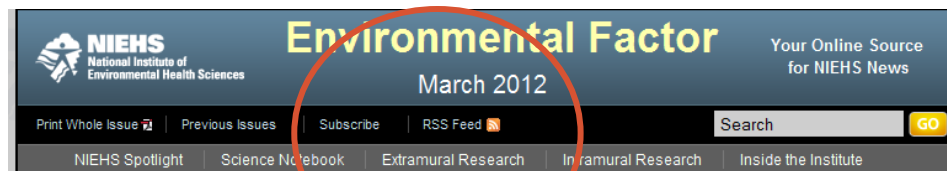
- Public health, outreach programs may have impacts that don't appear in peer reviewed publications
- Themes:
  - Partnerships
  - Leveraging
  - Products and Dissemination
  - Education and Training
  - Capacity Building
- Metrics driven from goal-based logic models
  - Activities, Outputs, Impacts



<http://www.niehs.nih.gov/pephmetrics>

## What do we do with the results?

- Congressional Justification, Inquiries, Testimony
- Presentations by Dr. Birnbaum and Senior NIEHS Staff (SOT, Council, Town Hall)
- Requests from the Communications Office
- Extramural Papers of the Month –  
<http://www.niehs.nih.gov/news/newsletter/>
- Program evaluations → Strategic Planning for Funding Announcement Opportunities



## Take home messages

- Accountability = the new reality
- Need to track products before we can measure impacts
  - Cite your grant number
  - Use the NIH Commons to update missed links
- Tell us why your work is important in your progress reports (plain language)
- Check out the PEPH Metrics Manual





# Questions?



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